

## COMPLETE LISTING OF PENDING CLAIMS

1. (original) A nucleic acid construct comprising:
  - (i) a sequence encoding an immunoglobulin heavy chain,
  - (ii) a sequence encoding an immunoglobulin light chain, and
  - (iii) one or more promoters capable of controlling expression of both sequences in a plant,wherein both said sequences contain a multivariable region in which preselected parts of said regions, which affect the encoded antibodies' ability to bind to variants of the target antigen, have been altered by exchanging, inserting or deleting one or more nucleotides as compared to the codes for the original said immunoglobulin sequence sequences.
2. (currently amended) The nucleic acid construct ~~as claimed in~~ in accordance with claim 1, wherein the promoter in (iii) is a dual promoter.
3. ((currently amended)) The nucleic acid construct ~~as claimed in~~ in accordance with claim 2, wherein said dual promoter is mas1'2' from the A. tumefaciens Ti plasmid.
4. (currently amended) The nucleic acid construct ~~as claimed in any one of claims 1 to 3~~ in accordance with claim 1 further comprising any one or more of the sequences selected from terminators, enhancers,

promoters, ~~or~~ and sequences to enable one of cloning ~~and/or~~ and purification of the protein.

5. (currently amended) A ~~vector containing the~~ nucleic acid construct of ~~any one of claims in accordance with claim 1 to 4 that forms a vector.~~
6. (currently amended) A nucleic acid construct ~~The vector as claimed in in accordance with claim 5 wherein said the~~ vector is C2200-DP-HC-LC.
7. (currently amended) A ~~plant cell comprising a~~ nucleic acid construct as defined in ~~any one of claims in accordance with claim 1 to 4 or a vector as claimed in claim 5 or claim 6~~ which is contained in a plant cell.
8. (currently amended) A nucleic acid construct in accordance with claim 7 contained in a plant cell that is contained in a plant part or in a whole plant, or part thereof comprising a plant cell as defined in claim 7.
9. (currently amended) A nucleic acid construct in accordance with claim 8 contained in a plant cell ~~The which is contained in a seed, and/or or other~~ propagating material of a plant ~~as claimed in claim 8.~~
10. (currently amended) A method for the production of populations of antibodies comprising:  
~~construction of~~ preparing a nucleic acid ~~constructs of claims~~  
construct in accordance with claim 1 to 4, or vectors of claim 5 or  
claim 6, and the expression of expressing said nucleic acids ~~or~~  
~~vectors~~ acid construct in a plants plant.

11. (currently amended) A method according to claim 10 wherein said plants allows one of posttranslational modifications ~~and/or~~ and overproduction of said immunoglobulin ~~proteins~~ chains.
12. (currently amended) A method according to ~~claim 10 or~~ claim 11 wherein comprising the step of post-translational modifications of post-translationally modifying the antibodies ~~are carried out~~ in the plants in vivo.
13. (currently amended) A method according to ~~claim 10 or~~ claim 11 wherein comprising the step of post-translational modifications of post-translationally modifying the antibodies ~~are carried out~~ in the plants in vitro.
14. (currently amended) A method according to ~~claims~~ claim 10 to 13 further comprising a second method for selecting plants producing antibodies that bind to a specific protein, or fragment thereof, the second method comprising the following steps:
- (a) purifying recombinant antibodies from a pool of plants expressing said antibodies;
  - (b) assaying said antibodies to determine whether any bind to the specific protein or fragment thereof;
  - (c) ~~and if the results of~~ when positive binding in step (b) ~~are positive is found~~, repeating steps (a) and (b) with the pool of plants sub divided into smaller groups; and
  - (d) repeating steps (a) to (c) until the plant producing the antibody that binds the specific protein or fragment thereof is identified.

15. (currently amended) The method ~~as claimed~~ in accordance with claim 14 wherein the initial pool contains 1000 plants, which is subdivided by a factor of ten in step (c).
16. (currently amended) The method ~~as claimed~~ in accordance with claim 14 ~~or claim 15~~ wherein the assay of step (b) is carried out by ~~means of~~ using a technique known as ELISA.
17. (currently amended) The method ~~as claimed in any one of claims in~~ accordance with claim 14 ~~to 16~~ wherein the specific protein is a viral protein.
18. (currently amended) The method ~~as claimed~~ in accordance with claim 17 wherein the protein is an HIV virus protein.
19. (currently amended) The method ~~as claimed~~ in accordance with claim 18 wherein said protein is an HIV-1 envelope protein.
20. (currently amended) A pharmaceutical composition comprising an antibody identified by the method ~~as claimed in any one of claims in~~ accordance with claim 14 ~~to 19~~.
21. (canceled)